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“GRODNO STATE MEDICAL UNIVERSITY”

DEPARTMENT OF SURGICAL DISEASES №1

PRACTICAL CLASSES
IN SURGERY

GUIDELINES
FOR 5TH YEAR STUDENTS
OF THE FACULTY OF FOREIGN STUDENTS
(IN ENGLISH)

Grodno 2010

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INTRODUCTION

The guidelines are made up according to the curriculum on surgical diseases for the 5th year students of the Faculty of Foreign Students and are aimed to improve mastering the theoretical material while preparing for practical classes.

Lesson № 1

Non-neoplastic diseases and damages of esophagus.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT

The achievements in surgery, therapy, roentgenology, endoscopy and other medical disciplines have promoted a rapid development of gastroenterology in recent decades. But the process of gastroenterology has hardly touched clinical esophagology. Numerous questions of physiology and pathology, morphology and function, diagnosing, prevention, treatment and timely endoscopy of esophageal diseases are not enough known by wide circle of doctors. As Z.Marzhatka says, for them esophagus is like "Cinderella" in gastroenterology. Recently the number of patients with chemical burns, postburn strictures, perforations and non-neoplastic esophageal pathology has increased. The knowledge of the first aid mechanism, approach and treatment modes is necessary for all the doctors. It conditions the necessity of students' acquaintance with the mentioned problem.

LESSON OBJECTIVE:

To teach students to diagnose non-neoplastic diseases and esophageal disorders, to choose a therapeutic approach in different stages of patients' treatment.

STUDENTS SHOULD KNOW:

1. Anatomy and physiology of esophagus.
2. Methods of examination of patients with esophageal disorders.
3. Classification of esophagus chemical burns.
4. Clinical representation of esophagus chemical burns.
5. Indications and methods of esophagus bouginage in corrosive strictures.
6. Indication and methods of surgical treatment of esophageal corrosive strictures.
7. Classification of esophageal diverticula.
8. Clinical picture of esophageal diverticula and their complications.
9. Indications and methods of esophageal diverticula surgical treatment.
10. Cardioesophageal relaxation. Clinical picture, diagnosing, conservative and operative therapy.
11. Esophageal achalasia. Etiology, clinical picture, diagnosing and treatment.
12. Reasons of esophageal perforation.
13. Diagnosing of micro- and macroperforation of the esophagus.
14. Treatment of the patients with esophageal perforations.
15. Modern endoscopic manipulations on the restoration of the upper gastrointestinal tract (laser, cryo- and diathermodestruction, esophageal strictures stenting).

STUDENTS SHOULD BE ABLE TO:

1. Take history of patients with esophageal diseases.
2. Analyze the results of esophagograms and endoscopic data.
3. Give the first aid in chemical burns of esophagus.
4. Formulate the clinical diagnosis; ground it on the basis of special examination techniques data.
5. Determine the treatment plan and indications for esophageal bouginage.
6. Evaluate the results of clinical and special examination techniques in esophageal perforations.

TEST CHECK:

1. Reasons of lethality in the first period of esophageal chemical burn. First aid and therapy.
2. Prevention of postburn esophageal strictures.
3. Combined chemical burns. Clinical picture and therapy.
4. Methods and terms of bouginage, possible complications.
5. Surgical methods of esophageal corrosive strictures treatment.
6. Zenker's diverticulum. Etiology, clinical picture, diagnosing, therapy.
7. Bifurcational, epiphrenic diverticula. Etiology, clinical picture, diagnosing, therapy.
8. Esophageal achalasia. Etiology, diagnosing conservative and surgical therapy.
9. Conservative therapy of cardia insufficiency.
10. Indications and methods of cardia insufficiency surgical therapy.
11. Minimally invasive, endoscopic esophageal surgery.

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Lesson № 2.

Diaphragmatic hernias, mediastinum tumors and cysts, mediastinitis.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT

Diaphragmatic hernia is not such a rare disease as it is considered to be. The similar opinion in clinical practice is often accompanied by diagnostic mistakes with severe consequences. The same concerns the diseases of mediastinum, though the available equipment allows to make a timely and correct diagnosis and to indicate the adequate therapy. All these make this problem crucial for students.

LESSON OBJECTIVE:

To teach students to diagnose the mentioned diseases and to define indications for surgeries. Modern principles of surgeries.

STUDENTS SHOULD KNOW:

1. Classification of diaphragmatic hernias.
2. Clinical representation of hernias: of diaphragm itself, of diaphragm weak areas, of esophageal opening.
3. Differential diagnosing of diaphragmatic hernias.
4. Specific examination techniques.
5. Complications of diaphragmatic hernias.
6. Indications for surgeries.
7. Character of surgery depending on the kind of hernia, modern laparoscopic techniques.
8. Complications of postoperative period.
9. Classification of mediastinum tumors.
10. Diagnosing and therapy of neurogenic, mesenchymal tumors and thymomas.
11. Diagnosing and therapy of mediastinum cysts (coelomic, bronchogenic cysts, enterocystomas, teratomas).
12. Classification of mediastinitises.
13. Diagnosing of acute mediastinitises.
14. Treatment of acute nonsuppurative mediastinitises.
15. Treatment of acute suppurative mediastinitises.

STUDENTS SHOULD BE ABLE TO:

1. Take history of patients with the mentioned diseases.
2. Evaluate clinical representation of pathogenic process.
3. Analyze the results of instrumental and laboratory tests.
4. Formulate a detailed clinical diagnosis; ground it on the basis of a differential diagnosis.
5. Determine the indications for a surgery.
6. Diagnose postoperative complications.

TEST CHECK:

1. Classification of diaphragmatic hernias.
2. Clinical picture and diagnosing of diaphragm itself and its weak areas.
3. Methods of diaphragm itself and its weak areas surgical treatment.
4. Classification of esophageal opening hernias.
5. Modern techniques of esophageal opening hernias diagnosing.
6. Indications for a surgery and choice of its method in esophageal opening hernias.
7. Complications of esophageal opening hernias, prevention and therapy.

8. Classification of mediastinum tumors.
9. Clinical picture and diagnosing of mediastinum tumors.
10. Indications for a surgery and its character.
11. Clinical picture and diagnosing of mediastinum cysts.
12. Principles of mediastinum cysts surgical treatment.
13. Classification of acute mediastinitises.
14. Clinical picture and diagnosing of acute mediastinitises.
15. Conservative and surgical treatment of patients with acute mediastinitis.
16. Results of scientific research of the Department of surgical diseases #1 of GrSMU.
(Therapy of acute suppurative mediastinitis by constant irrigation with active aspiration, ass.prof M.A. Mozheyko).

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Lesson №3.

Postgastroresectional and postvagotomy syndromes.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT

Stomach resections and vagotomies in surgical treatment of stomach and duodenal ulcer can be accompanied by various pathological states. These states are generally called “the diseases of operated stomach”. Various clinical forms of postresectional and postvagotomy syndromes demand a complex approach to patients’ examination and choice of adequate therapy. Especially urgent is prevention of “the diseases of operated stomach”.

LESSON OBJECTIVE:

To teach students to diagnose pathological states, developing after stomach resection and vagotomy, to define the methods of their treatment and prevention.

STUDENTS SHOULD KNOW:

1. Classification of postresectional and postvagotomy syndromes.
2. Pathogenesis of operated stomach diseases.
3. Clinical representation of dumping syndrome, peptic, recurrent, persisting ulcers; afferent loop syndrome, small stomach, gastro-jejuno-duodenal reflux, postfundoplication complications.
4. Laboratory and instrumental methods of postresectional and postvagotomy syndromes diagnosing.
5. Principles of operated stomach diseases conservative therapy.
6. Indications and variants of surgeries in dumping syndrome, afferent loop syndrome, peptic ulcers, duodenostomy, postfundoplication complications.
7. Principles of operated stomach diseases prevention.

STUDENTS SHOULD BE ABLE TO:

1. Take history of patients with suspected postresectional and postvagotomy syndromes.
2. Interpret data of laboratory tests.
3. To carry out complex analysis of the results of instrumental examination techniques.
4. Carry out differential diagnosing of the operated stomach diseases.
5. Formulate a detailed clinical diagnosis.
6. Make indications for conservative and surgical treatment of postresectional and postvagotomy syndromes.
7. Define the variants of surgical corrections of the operated stomach diseases.
8. Prevent development of pathological processes after stomach resection and vagotomy.

TEST CHECK:

1. Classification of operated stomach diseases.
2. Pathogenesis of dumping syndrome.
3. Instrumental diagnosing of dumping syndrome.
4. Surgical methods of dumping syndrome correction.
5. Differential diagnosing of peptic ulcers after stomach resection and vagotomy.
6. Treatment principles of gastroenteroanastomosis peptic ulcers, recidivation of ulcers after vagotomies.
7. Clinical forms of afferent loop syndrome.
8. Methods of afferent loop syndrome surgical correction.
9. Diagnosing of gastro-jejuno-duodenal reflux.
10. Factors, promoting postgastroresectional asthenia development.

11. Reasons of the development of vagotomized stomach diseases.
12. Classification of postvagotomy gastrostasis.
13. Variants of vagotomized stomach motor-evacuation function disorders treatment.
14. Methods of vagotomy duodenosthesis diagnosing.
15. Nature of Robinson's operation.
16. Diagnosing of postfundoplicational complications.
17. Methods of postfundoplicational complications therapy.

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Lesson №4.

Chronic pancreatitis and its complications. Tumors of the pancreas.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT

Chronic pancreatitis is chronic progressive disease of pancreas, characterized by inflammatory-degenerative changes in the gland tissue with fibrosis outcome and incretory and excretory gland function disorders.

The recent years are characterized by increasing spread of various diseases connected with pancreas, primarily pancreatitis, tumors of pancreas and periampullary area. It is

conditioned by the growth of etiological factors based on pancreas lesions, particularly alcoholism, obesity, nutrition disorders, unfavorable ecological factors, home and traffic injuries.

In this connection it is urgent to use methods of timely and accurate diagnosing of pancreas chronic diseases and to apply the most effective treatment modes.

LESSON OBJECTIVE:

On the basis of knowledge in anatomy, physiology, pathogenic mechanisms of diseases development, objective and instrumental examination techniques to learn to diagnose, carry out differential diagnosing, to determine a therapeutic approach and extent of medical assistance in chronic pancreatitis.

STUDENTS SHOULD KNOW:

1. Etiology, pathogenesis and classification of chronic pancreatitis (etiological, morphological, clinical).
2. Peculiarities of diagnosing, clinical representation and differential diagnosing of chronic pancreatitis, its complications and pancreas neoplasms.
3. The extent of conservative therapy of chronic pancreatitis.
4. Criteria of the transition from conservative therapy to surgical treatment.
5. Variants of chronic pancreatitis surgical treatment.
6. Diagnosing and therapeutic approach in complications of chronic pancreatitis.
7. Criteria of operability and inoperability in malignant and benign tumors of pancreas with a certain extent of surgical intervention.
8. Therapeutic approach in pancreas tumors.

STUDENTS SHOULD BE ABLE TO:

1. Take history and carry out an objective examination of a patient with chronic pancreatitis.
2. Make up an examination plan.
3. Carry out differential diagnosing.
4. Evaluate the results of objective, instrumental and laboratory examinations correctly.
5. Ground the indications for conservative or surgical treatment on the basis of conducted examinations.
6. Define the extent of conservative and surgical treatment.

TEST CHECK:

1. Reasons of chronic pancreatitis.
2. Clinical forms of chronic pancreatitis.
3. Pathoanatomical changes in the pancreas.
4. Clinical representation in chronic pancreatitis.
5. Differential diagnosing of chronic pancreatitis.
6. Mechanism of cysts formation in chronic pancreatitis.
7. Laboratory diagnosing of chronic pancreatitis.
8. Roentgenologic and endoscopic examination techniques in chronic pancreatitis.
9. Instrumental examination techniques.
10. Conservative therapy of chronic pancreatitis.
11. Methods of chronic pancreatitis surgical therapy.
12. Intraoperative diagnosing of chronic pancreatitis.
13. Diagnosing and treatment of chronic pancreatitis complications.
14. Diagnosing and treatment of benign tumors of the pancreas.
15. Diagnosing and treatment of malignant neoplasms of the pancreas.

16. Rehabilitation of the patients after surgical treatment of chronic pancreatitis and its complications.

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Lesson № 5.

Obstructive jaundice, liver focal lesions

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT

Modern diagnosing and targeted therapy of patients with obstructive jaundice of neoplastic and nonneoplastic genesis is still urgent problem of surgical, therapeutic and infectious hospitals. It is conditioned by considerable growth of diseases, promoting jaundice, by

various reasons of bile passages obstruction, by implementation of the latest technologies on the stage of differential diagnosing and therapy.

In recent years surgeons operate patients with liver focal lesions more often, what became possible thanks to ultrasonic scanning and tomography implementation. These examination techniques help to diagnose the mentioned pathologies. The progress in native surgery influenced liver operations, so liver resection is being used more often now, than it used to be. This fact conditions the necessity to study the mentioned problem.

LESSON OBJECTIVE:

To teach students to diagnose diseases, promoting obstructive jaundice and liver focal lesions; to teach students to determine treatment modes for each patient.

STUDENTS SHOULD KNOW:

1. Reasons of obstructive jaundice of neoplastic (cholangiolithiasis, stenosis of large duodenal papilla, biliary ducts strictures, strictures of bile-excreting anastomoses, pancreatitis and its complications), and nonneoplastic genesis (pancreas cancer, large duodenal papilla cancer, cholecyst cancer, extrahepatic biliary ducts cancer, liver tumor).
2. Clinical representation, its peculiarities depending on the reason of obstructive jaundice.
3. Instrumental methods of diagnosing (roengenological examinations, retrograde pancreacholangiography, transhepatic and percutaneous cholangiography, videolaparoscopy with cholecystcholangiography, fistulocholangiography).
4. Minimally invasive surgeries in patients with obstructive jaundice (laparoscopic cholecystostomy, endoscopic papillosphincterotomy, endoscopic retrograde drainage and endoprosthesis of common bile duct).
5. Surgeries in patients with obstructive jaundice, conditioned by the obstruction of the bile ducts distal parts.
6. Therapy of the patients with high bile ducts strictures.
7. Surgical therapy of patients with obstructive jaundice of tumorous origin.
8. Prevention and therapy of postoperative complications.
9. Diseases, characterized by formation of liver focal lesions; methods of heir diagnosing, indications for operations and the extent of surgical help.

STUDENTS SHOULD BE ABLE TO:

1. Take history of patients with a suspicion on obstructive jaundice, evaluate a clinical representation of the disease taking into consideration the reasons of ducts obstruction.
2. Analyze the results of laboratory tests.
3. Evaluate the data of modern invasive and noninvasive examination techniques correctly.
4. Formulate a detailed clinical diagnosis, ground it on the basis of differential diagnosis.
5. Determine the indications for minimally invasive surgeries and surgical operations.
6. Timely diagnose postoperative complications.
7. Interpret the results of special examination techniques in liver focal lesions and to make indications for surgeries.

TEST CHECK:

1. Diagnosing and therapy of patients with cholangiolithiasis, complicated by obstructive jaundice.
2. Diagnosing and therapy of large duodenal papilla stenosis, complicated by jaundice.
3. Bile ducts strictures of nonneoplastic genesis (reasons, diagnosing, treatment).
4. Diagnosing and therapy of obstructive jaundice, conditioned by pancreatitis and its complications.
5. Strictures of bile-excreting anastomoses (diagnosing, treatment, prevention).

6. Obstructive jaundice of neoplastic genesis (reasons, diagnosing, peculiarities of therapy, depending on tumor localization and status of a patient).
7. Modern methods of various forms of obstructive jaundice diagnosing.
8. Places and kinds of minimally invasive surgeries in obstructive jaundice.
9. Algorithm of a surgery in obstructive jaundice.
10. Intraoperative diagnosing of obstructive jaundice reasons.
11. Indications and kinds of internal and external drainage of bile ducts.
12. Methods of transhepatic drainage of extra- and intrahepatic bile ducts.
13. Surgical approach in treating patients with obstructive jaundice combined with acute purulent cholangitis.
14. Possible complications of surgeries in patients with obstructive jaundice (diagnosing, treatment, prevention).
15. Diagnosing and prevention of hepatic and hepatonephric insufficiency.
16. Liver focal lesions (reasons, diagnosing, treatment).
17. The results of scientific research of the Department of surgical diseases #1 GrSMU (Method of liver resection in case of its focal lesion, bouginage and transhepatic drainage of bile ducts, prof. Batvinkov N.I.).

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Lesson 6

Postthrombophlebitic syndrome and lymphedema of lower extremities.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT

10-40 % of patients with recent acute thrombophlebitis of lower extremities deep veins have postthrombophlebitic syndrome. Its diagnosing demands complex use of instrumental noninvasive and invasive methods. In therapy of postthrombophlebitic syndrome conservative and surgical methods are applied. The most often surgery is separation of the connection between deep and superficial veins.

Lymphedema (bucnemia) concerns to the group of slowly progressing diseases. It arises in people of working age and difficulties in its therapy point urgency of bucnemia study.

LESSON OBJECTIVE:

To teach students to diagnose, define preventive measures and treat patients with postthrombophlebitic syndrome and lymphedema of lower extremities.

STUDENTS SHOULD KNOW:

1. Etiology and pathogenesis of postthrombophlebitic syndrome and lymphedema of lower extremities.
2. Clinical forms of postthrombophlebitic syndrome, stages of lower extremities thrombosis, stages of hemodynamic disorders.
3. Variants of clinical therapy of lymphedema.
4. Functional, laboratory and instrumental methods of postthrombophlebitic syndrome and lymphedema (phlebotometry with Valsalva test, roentrenocontrast phleboscropy and phlebosophy, lymphografy, computer tomography, ultrasonic scanning).
5. Differential diagnosing of postthrombophlebitic syndrome and lymphedema.
6. Indications for surgeries of patients with postthrombophlebitic syndrome and lymphedema of lower extremities.
7. Surgical therapy of lymphedema and postthrombophlebitic syndrome.
8. Prevention of postthrombophlebitic syndrome.

STUDENTS SHOULD BE ABLE TO:

1. Take history and complaints of a patient with a suspected postthrombophlebitic syndrome and lymphedema of lower extremities, interpret clinical picture of the disease.
2. Evaluate the results of functional, laboratory and instrumental examination techniques.
3. Formulate a detailed clinical diagnosis.
4. Carry out a differential diagnosis of postthrombophlebitic syndrome and lymphedema.
5. Make indications for conservative and surgical therapy of postthrombophlebitic syndrome and lymphedema of lower extremities.
6. Carry out preventive therapy of postthrombophlebitic syndrome.
7. Diagnose postoperative complications.

TEST CHECK:

1. Pathogenesis of hemodynamic disorders in postthrombophlebitic syndrome.
2. Classification of postthrombophlebitic syndrome.
3. Clinical forms of postthrombophlebitic syndrome.
4. Methods of postthrombophlebitic syndrome functional diagnosing.

5. Invasive and non-invasive diagnosing of postthrombophlebitic syndrome.
6. Differential diagnosing of postthrombophlebitic syndrome.
7. Indications for surgical therapy of postthrombophlebitic syndrome.
8. Principles of postthrombophlebitic syndrome conservative therapy.
9. Surgeries, removing shunt from the deep veins to superficial in postthrombophlebitic syndrome.
10. Prevention of postthrombophlebitic syndrome.
11. Pathogenesis of lower extremities lymphedema.
12. Classification of chronic lymphostasis of lower extremities.
13. Stages of lymphedema of lower extremities.
14. Diagnosing of chronic lymphostasis.
15. Differential diagnosing of primary and secondary lymphedema.
16. Variants of lymphangiectomy.
17. Methods of lymphovenous fistulas formation.
18. Duplex scanning of lower extremities venous system.

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Lesson 7

Diseases of aorta and its branches.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT

Thromboobliterating diseases (atherosclerosis, non-specific aorto-arthritis), anomalies of vessels, skeleton bones, muscles development can lead to the disorders of blood circulation along the aorta and its large vessels. It results in ischemic syndrome, that has rather specific clinical symptomatology, characteristic of blood circulation insufficiency only in a specific arterial basin.

In recent years modern techniques are being used for diagnosing and treating of aorta and its branches diseases. These techniques are highly effective, prolong patients' ability to work and lower the lethality rate in patients with diseases of aorta and its branches.

LESSON OBJECTIVE:

Teach students to diagnose various diseases of aorta and its branches, determine the treatment modes.

STUDENTS SHOULD KNOW:

1. Reasons of occlusive-stenotic lesions of aorta and its branches.
2. Clinical representation of aorta and its branches diseases.
3. Instrumental methods of aorta and its branches diseases diagnosis (angiography, ultrasonography).
4. Principles of conservative therapy of aorta and its branches diseases.
5. Surgical therapy of aorta and its branches diseases.

STUDENTS SHOULD BE ABLE TO:

1. Take history of a patient with suspected aorta and its branches diseases; interpret the results of physical examination.
2. Evaluate the results of invasive and non-invasive diagnosing techniques.
3. Formulate a clinical diagnosis, ground it.
4. Make indications for conservative and surgical therapy of aorta and its branches diseases.
5. Define the variant of a presupposed arterial reconstruction.
6. Diagnose and treat postoperative complications.

TEST CHECK:

1. Etiology of occlusive lesions of aorta arch branches.
2. Stages of brain hemodynamic insufficiency.
3. Variants of therapy of lesions of aorta's arch branches.
4. Differential diagnosing of aorta's coarctation syndrome.
5. Classification of aorta aneurism.
6. Disseminating thoracic aorta aneurism.
7. Clinical representation of disseminating thoracic and abdominal aorta aneurism.
8. Methods of aorta aneurism diagnosing.
9. Variants of surgical therapy of peripheral arteries aneurisms.
10. Pathogenesis of vasorenal hypertension.
11. Clinical representation of chronic abdominal ischemia.
12. Classification of chronic insufficiency of arterial circulation in lower extremities.
13. Functional probes of lower extremities ischemia.
14. Direct surgeries in Leriche's syndrome.
15. Minimally invasive methods of arterial reconstructions.
16. Laser angioplasty.
17. Extracoronary arteries stenting and aorta endostenting in its aneurisms.

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Lesson 8

Portal hypertension.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT

The term "Portal hypertension" is characterized by a complex of changes, arising as a result of blood flow obstruction in portal system, what can be caused by various diseases.

Advanced diagnostics gives opportunities to define the level of blood flow obstruction in the portal system as accurately as possible. Such diagnosing techniques are: ultrasonic scanning, computer tomography, MRI, portography.

The most often disease leading to portal hypertension is liver cirrhosis. Early diagnosing, adequate treatment, indications for a surgery give opportunity to solve a problem of surgical treatment of such severe complication as portal hypertension.

LESSON OBJECTIVE:

To teach students to diagnose diseases, causing portal hypertension and define the treatment modes for each patient.

STUDENTS SHOULD KNOW:

1. Reasons of portal hypertension:
 - Overhepatic blood flow block (Pick's cirrhosis, Chiari's disease, Budd-Chiari syndrome)
 - Intrahepatic Block of portal blood flow (liver cirrhosis of various etiologies, liver tumors, liver fibrosis)
 - Subhepatic block (phlebosclerosis, portal veintrombosis, inherent cirrhosis, portal vein and its branches atresia, portal vein compression by scars, tumors, infiltrate)
 - Mixed block
2. Clinical representation of portal hypertension syndrome depending on the level of blood flow obstruction.
3. Methods of diagnosing (ultrasonic scanning, computer tomography, MRI, portography, laparoscopy).
4. Indications for operations.
5. Groups of surgeries, used for liver cirrhosis and portal hypertension:
 - surgeries aimed at creating new ways of blood outflow from the portal system;
 - surgeries aimed at removal of ascitic fluid from the abdominal cavity;
 - surgeries aimed to reduce blood flow to the portal system;

- surgeries aimed at elimination of connection between esophageal and stomach veins with veins of the portal system;
- surgeries aimed at liver regeneration increase;

STUDENTS SHOULD BE ABLE TO:

1. Take history of a patient with symptoms of portal hypertension syndrome.
2. Prescribe complete examination, necessary for specification of portal hypertension reason.
3. Indicate therapy according to various levels of portal blood flow block.
4. Algorithm of surgeries in portal hypertension.

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Lesson 9

Postcholecystectomy syndrome.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT:

Postcholecystectomy syndrome is a complicated symptom complex, arising in patients with recent surgeries of cholecystectomy. This symptom complex appears if the diseases of various bile-excreting ducts and surrounding organs were not diagnosed before the surgery or developed after the surgery. One of the reasons is the absence of preoperational and intraoperational examination of the patients or wrong interpretation of examination results.

Diagnosing and therapy of postcholecystectomy syndrome is rather difficult as there are various diseases, promoting it. All these diseases demand an individual approach.

LESSON OBJECTIVE:

On the basis of knowledge in anatomy, pathophysiology, methods of objective and instrumental examination to teach to diagnose, carry out differential diagnosing, choose correct therapeutic approach and the extent of medical help, depending on the reasons of postcholecystectomy syndrome.

STUDENTS SHOULD KNOW:

1. Etiology and pathogenic mechanisms of postcholecystectomy syndrome.
2. Classification of postcholecystectomy syndrome.
3. Clinical representation and diagnosing techniques of postcholecystectomy syndrome, conditioned by organic bile ducts lesions (not corrugated in cholecystectomy, arising as a result of surgery).
4. Clinical representation and diagnosing techniques of postcholecystectomy syndrome, conditioned by the pathology of other organs and systems (gastrointestinal tract, urinary system, central nervous system, locomotor apparatus, heart diseases).
5. Endoscopic treatment modes of postcholecystectomy syndrome (large duodenal papilla stenosis, ducts strictures)
6. Surgical treatment methods of postcholecystectomy syndrome.
7. Prevention of postcholecystectomy syndrome.

STUDENTS SHOULD BE ABLE TO:

1. Take history of patients with postcholecystectomy syndrome.
2. Carry out an objective examination and prescribe further examination and therapy plan.
3. Carry out differential diagnosing (stenosis and insufficiency of the large duodenal papilla, ducts strictures, choledocholithiasis, residual cholecyst).
4. Make a diagnosis on the basis of the conducted examinations. Point the reasons of postcholecystectomy syndrome.
5. Determine therapeutic approach to the patient with postcholecystectomy syndrome.

TEST CHECK:

1. Conception of postcholecystectomy syndrome.
2. Reasons and classification of postcholecystectomy syndrome.
3. Cholelithiasis (reasons, clinical representation, diagnosing, therapy).
4. Large duodenal papilla diseases (reasons, clinical representation, diagnosing, therapy).
5. Bile ducts strictures (reasons, clinical representation, diagnosing, therapy).
6. Residual cholecyst (reasons, clinical representation, diagnosing, therapy).
7. Papillomatous changes of the large duodenal papilla and cystous bile ducts transformation (reasons, clinical representation, diagnosing, therapy)
8. Endoscopic methods of postcholecystectomy syndrome therapy.
9. Recurring surgeries of bile-excreting ducts.
10. Prevention of postcholecystectomy syndrome.

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Lesson 10

Spleen diseases and traumas and blood system diseases demanding splenectomy.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT:

The spleen is the unpaired parenchymatous organ, located in the abdominal cavity in the area of left hypochondrium. Splenectomies in spleen diseases have being used since 1549. Various instrumental techniques are used for anatomic and functional spleen state evaluation. These techniques are: ultrasonic scanning, computer tomography, MRI, angiography, radionuclide examination, laparoscopy. Splenectomy is used as a method of surgical treatment of spleen diseases, such as: infarction, cysts, abscesses, splenomegaly, hypersplenism.

LESSON OBJECTIVE:

On the basis of knowledge in anatomy, pathophysiology, objective and instrumental examination techniques to teach to diagnose, carry out differential diagnosing, choose correct therapeutic approach and extent of medical help in spleen traumas and diseases and blood system diseases, demanding splenectomy.

STUDENTS SHOULD KNOW:

1. Etiology, pathogenesis, diagnosing and therapy of spleen cysts and infarctions.
2. Etiology, pathogenesis, diagnosing and therapy of spleen abscesses and traumas.
3. Hypersplenism (clinical representation, diagnosing and therapy).
4. Splenomegaly (clinical representation, diagnosing and therapy depending on the reason).
5. Spleen traumas (classification, clinical representation, diagnosing and therapy).
6. Recent methods of splenectomy.

STUDENTS SHOULD BE ABLE TO:

1. Take history of the patients with spleen traumas or diseases.
2. Carry out an objective examination and make up an examination plan.
3. Carry out differential diagnosing of spleen traumas and diseases.
4. Make indications and contraindications, define a surgical approach for splenectomy.
5. Define the therapeutic approach and primary diagnosing techniques in spleen traumas.

TEST CHECK:

1. Anatomical and physiological spleen peculiarities.
2. Spleen infarction (etiopathogenesis, clinical representation, diagnosing and therapy).
3. Spleen cysts: nonparasitic and parasitic (etiopathogenesis, clinical representation, diagnosing and therapy).
4. Spleen abscess (etiopathogenesis, clinical representation, diagnosing and therapy).
5. Spleen traumas (etiopathogenesis, clinical representation, diagnosing and therapy).
6. Splenomegaly (malaria, leishmaniasis, tuberculosis, benign and malignant spleen tumors) and hypersplenism (etiopathogenesis, clinical representation, diagnosing and therapy).
7. Werlhof's disease (thrombocytopenic purpura) (etiopathogenesis, clinical representation, diagnosing and therapy).
8. Anemias (hemolytic, hypoplastic, aplastic) (etiopathogenesis, clinical representation, diagnosing and therapy).
9. Gaucher's disease (etiopathogenesis, clinical representation, diagnosing and therapy).
10. Leukosis and lymphogranulomatosis (etiopathogenesis, clinical representation, diagnosing and therapy).

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Lesson 11

Organs and tissues transplantation.

MOTIVATIONAL CHARACTERISTICS OF THE SUBJECT:

Transplantology is one of the most dynamically developing spheres of clinical and experimental medicine. Modern transplantology unites such important areas as transplantational immunology, organs and tissues conservation, creation and application of superficial organs, clinical and experimental transplantology. Organs and tissues transplantation has been being often presented in the press at the end of 20th century. It is rather complicated medical problem and the considerable success has been reached only recently. The future of the problem depends on solving of fundamental theoretical, juridical, material and technical transplantological questions.

The interest in the transplantology is very high because transplantation of majority of vital parts is the only effective method of treatment of nonreversible pathologies in terminal stage.

LESSON OBJECTIVE:

On the basis of knowledge in anatomy, histology, pathophysiology, law and etiopathogenesis of pathologies which destroy functional biological structures of a human organism to teach students to define correctly the extent of medical help and therapeutic approach if transplantation is necessary.

STUDENTS SHOULD KNOW:

1. Basic transplantological terminology and kinds of organ and tissue transplantation.
2. Legislative legal acts, regulating operations on transplantation in Belarus.
3. Organizational and structural subdivisions, responsible for transplantological help to the population of Belarus.
4. Nonreversible pathological processes, leading to a persistent loss of functional importance of biological structures and being the indications for a surgery.
5. Kinds and techniques of tissue transplantation.
6. Transplantation of various organs and organ complexes.
7. Pharmacological supply of various stages of transplantological procedures.
8. The results of organs and tissues transplantation and prospects of transplantological help development.

STUDENTS SHOULD BE ABLE TO:

1. Take history and carry out clinical examination, needing tissue transplantation (dermoplasty, plastic surgery of the arterial vascular bed).
2. Interpret the results of instrumental examination at the stages of transplantation procedure.
3. Define therapeutic approach and extent of medical help of the patients with nonreversible organs and tissues lesions.
4. Make up a prescription list for a patient with recent organs and tissues transplantations.

TEST CHECK:

1. Name the kinds of organs and tissues transplantations.

2. What regulatory legislative acts regulate organs and tissues transplantations on the territory of the Republic of Belarus?
3. Enumerate organs and tissues, which are transplanted in clinical conditions.
4. Give complex of measures, including the preparation and the procedure of transplantation procedure itself.
5. Give indications and methods of surgeries in heart, parenchymatous organs, tissue structures.
6. By what are the results of complications of alo- and ksenogenous transplantations are conditioned?
7. Name the preventive measures and methods of therapy of organs and tissues transplantations complications.

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